



ORIGINAL RESEARCH PAPER

Obstetrics & Gynaecology

AN AYURVEDIC MANAGEMENT OF INTRA UTERINE GROWTH RESTRICTION (W.S.R) TO UPAVISHTAKA – A CASE STUDY

KEY WORDS: Iugr, Antenatal Care, Low Birth Weight, Garbhavyapada, Upavishtaka

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ABSTRACT

Antenatal care is most precious to maintain good health for both mother and developing fetus during pregnancy. The ultimate goal of antenatal care is to achieve healthy mother and baby. Normal delivery of a baby depends upon various factors. Neonate's birth weight is one of the most important factor. IUGR causes many antepartum, intrapartum and postpartum complications in fetus such as chronic fetal distress, fetal death, respiratory distress syndrome, acidosis, hyper viscosity syndrome, intraventricular haemorrhage. Also causes long term complications like learning disabilities, speech defects. In developing countries like India this problem is very common due to inadequate intake of nutritious food by mother during pregnancy. In Ayurveda there are diseases described under the heading of *garbhavyapada* such as *upavishtaka*, *nagodara*, *garbhashosha* in which we can correlate the IUGR with *upavishtaka*. Along with these diseases their management is also emphasized in *samhitas*. In this case study we have used an *anubhuta yoga* named as *vidaryadi ksheerpaka* for the management of *upavishtaka*. The contents in this *yoga* are having *brihan*, *shita virya*, *madhura rasa*, and *vrishya* properties. With the help of these *ayurvedic* medicines we can manage the IUGR in an affordable and healthy way.

INTRODUCTION:

Pregnancy is an important milestone in women life. *Ayurveda* recommends many life style and dietary regimens to prevent complications and diseases. *Acharya Charaka* and *Vagbhata* have described that due to *mithya ahar vihar*, over exertion, stress, malnutrition and not following *Garbhini Paricharya*, women suffer from *Yonigatastrava* which in turn causes *Upavishtaka*. *Upavishtaka* is associated with nourishment of fetus which is totally depends on mother. The ultimate goal of antenatal care is to achieve healthy mother and baby. The concept of *Suprajajana* is the prime concern of *Ayurveda* since long time. In fact most of the care of pregnant women is attributed towards the well being of fetus. Intrauterine growth restriction [IUGR] is a term used to describe the condition of a fetus whose size or growth is subnormal when compared to the gestational age. A fetus is growth restricted if its weight is less than 10th percentile for its gestational age.⁽¹⁾ However, growth restriction can occur in preterm, term or post-term babies. The growth restriction in-utero is evaluated with the *Anunnata Kukshi* and *Garbha Aspandana* (reduced fetal activity mainly due to the reduced amniotic fluid) which are the features of *Garbhakshaya*.⁽²⁾ Timely diagnosis and management of IUGR is one of the major achievements in contemporary obstetrics. If the growth restricted fetus is identified and appropriate management instituted, perinatal mortality can be reduced. The incidence of IUGR among hospital born live infants is 9.65% as reported by National neonatal prenatal database of India.⁽³⁾ In *Ayurveda* for the management of *garbhakshaya*, *Acharya Sushruta* has mentioned the usage of *Ksheera Basti* (medicated milk enema) and *Medhya* (nootrophic) dravyas from 8th month onwards to nourish the growth restricted fetus.⁽⁴⁾ *Vidaryadi ksheerpaka* is the formulation of some *dravyas* having *brihan*, *shita virya*, *madhura rasa*, *vrishya*, *medhya* properties and anabolic effects which can be used for the management of Intra uterine growth restriction.

AIMS AND OBJECTIVES:

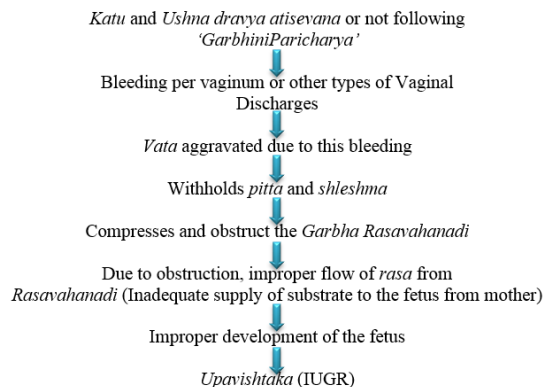
- To study the effect of *Vidaryadi ksheerpaka* in the management of IUGR (*Upavishtaka*)

MATERIAL AND METHOD:

A 25 years old G₃ P₂ L₂ pregnant woman had approached OPD of Seth Govindji Raoji Ayurved Mahavidyalaya and Rughalaya, Solapur with period of gestation 28 weeks complaining of pain in abdomen since 2 – 3 days. Her marital status was 5 years, and menstrual history was regular with LMP 25-10-2017

and EDD as per LMP was 01-07-2018. Her obstetric history revealed that she had previous 2 LSCS having 2 female child of 3 years and 2 years respectively. Her built and nutritional status was average. Her general condition and vitals were also normal. Per abdominal examination revealed fundal height of 26-28 weeks with longitudinal lie, FHS 142 beats per minute. Fetal movements were also appreciated. **Ultrasound report showed asymmetrical IUGR with fetal weight 1178 gm.** There was no relevant medicinal or drug history and thyroid function test was normal. The patient was Rh positive. By considering Intra Uterine Growth Restriction (*Upavishtaka*), she was advised to take *vidaryadi ksheerpaka* till term.

SAMPRAPTI OF UPAVISHTAKA :



SELECTION OF DRUGS:

By considering the symptoms and the *Samprapti* of *Upavishtaka* (IUGR), a proposed drug formulation namely "*Vidaryadi ksheerpaka*" was selected. The selected drugs for the study having *madhur rasa* and *madhur vipak*, *vataghna*, *pittaghna*, *balya*, *bruhaniya*, and *gharbhaposhak* properties. *Acharya vagbhata* mentioned the most of above dravyas in *masanumasik kashaya* which is the part of *garbhini paricharya*.⁽⁵⁾

Table No. 01 - Vidaryadi ksheerpaka ingredients:

| Sr. No | Drugs | Latin Name | Part used | Quantity |
|--------|-------------|-------------------|-----------------|----------|
| 1) | Vidarikanda | Pueraria tuberosa | Rhizome (Kanda) | 2gm |

| | | | | |
|----|-------------|----------------------|--------------|------|
| 2) | Sariva | Hemidesmus indicus | Root (Moola) | 2gm |
| 3) | Ashwagandha | Withania somnifera | Root (Moola) | 2gm |
| 4) | Bala | Sida cordifolia | Root (Moola) | 2gm |
| 5) | Guduchi | Tinospora cordifolia | Stem (Kand) | 2gm |
| 6) | Shatavari | Asparagus resemosus | Root (Moola) | 2gm |
| 7) | Sita | ---- | | 2gm |
| 8) | Godugdha | ---- | | 96ml |
| 9) | Goghruta | ---- | | 5gm |

Table No. 02 - Properties of dravyas in vidaryadi ksheerpaka.⁽⁶⁾

| Sr. No | Drugs | Rasa | Virya | Vipaka | Doshaghnata |
|--------|-------------|----------------------|-------|--------|-----------------|
| 1) | Vidarikanda | Madhur | Shita | Madhur | Vata,Pittahara |
| 2) | Sariva | Madhur, Tikta | Shita | Madhur | Tridosahara |
| 3) | Ashwagandha | Katu, Tikta, Kashaya | Ushna | Katu | Kapha, Vatahara |
| 4) | Bala | Madhur | Shita | Madhur | Vata,Pittahara |
| 5) | Guduchi | Tikta, Kashaya | Ushna | Madhur | Tridosahara |
| 6) | Shatavari | Madhur | Shita | Madhur | Vata,Pittahara |
| 7) | Sita | Madhur | Shita | Madhur | Vata,Pittahara |
| 8) | Godugdha | Madhur | Shita | Madhur | Vata,Pittahara |
| 9) | Goghruta | Madhur | Shita | Madhur | Vata,Pittahara |

METHOD OF PREPARATION OF VIDARYADI KSH ERPAKA:

Ksheerapaka is prepared by following classical guidelines (As per sharangadhara samhita), Fine powder of Vidarikanda, sariva, ashwagandha, bala, guduchi, shatavari each 2gm ratio taken (total 12gm) with 8 part of cow milk (96ml) and cow milk's 4 part of water (384ml) are boiled on mandagni (mild flame) till only milk part remains.⁽⁷⁾

DOSE AND ANUPANA:

Patient was treated with Vidaryadi ksheerapaka.

- Matra – 96 ml once a day
- Kal - Paschatbhukta.
- Anupana - Goghruta
- Duration - Till Delivery.
- Follow up –After 1 month

OBSERVATION AND RESULT:

Table No. 03 – Ultrasonography findings – fetal biometry:

| Sr. No | Ultrasonography parameters | Before treatment | After treatment |
|--------|------------------------------|------------------|-----------------|
| 1) | Amniotic Fluid Index (AFI) | Adequate | Adequate |
| 2) | Estimated fetal birth weight | 1178 gm | 2100 gm |
| 3) | Biparietal diameter | 7.5 cm | 8.6 cm |
| 4) | Head circumference | 26.9 cm | 31.5 cm |
| 5) | Abdominal circumference | 23.4 cm | 29.3 cm |
| 6) | Femur length | 5.2 cm | 5.9 cm |
| 7) | Gestational age | 28 wks 5 days | 33 wks 4 days |

DISCUSSION:

Upavishataka i.e IUGR is one of the garbhavyapada. It is most common disorder in pregnant women and it carries increased risk of morbidity and mortality. After completion of clinical trial on this patient it was observed that there was considerable improvement in all the features of Upavishataka.

PROBABLE MODE OF ACTION OF VIDARYADI KSH ERPAKA:

- Vidarikanda has vata pitta shamak, vrishya, varnya, balya, brihana and rasayana properties.⁽⁸⁾
- Sariva possesses garbhasthapak, deepana, pachana, kaphaghna and rasayana properties.⁽⁹⁾
- Ashwagandha has properties as vata kapha shamak, brihaniya, rasayana, deepaniya, vrishya and garbha sthapaka because of its good nutritive value. It helps to maintain muscle strength and muscle tone of garbhashaya and also helps to gain muscle mass of developing fetus. It has an antioxidant properties which helps to cure oxidative damage by neutralizing the free radicals. It also helps to improve microcirculation which is the main cause of IUGR.⁽¹⁰⁾
- Bala has prajasthapana, balya, brihan, and ojovardhaka properties therefore it helps to gain muscle mass of fetus and it also helps to gives strength to garbhashaya.⁽¹¹⁾
- Guduchi acts as an appetizer hence it reduces angima ndhya, and also acts an rasayana by decreasing dhatvag nimandhya.⁽¹²⁾
- Shatavari is well known drug for women health, it has balya, rasayana, garbhaposhak properties.⁽¹³⁾
- These drugs along with ksheerpaka by making its ksheerpaka has good impact on the growing fetus and is found to be effective in development of fetus also. The contents of vidaryadi ksheerpaka are having garbhaposhak and garbhasthapak properties as mentioned above hence, it can be the useful formulation to treat IUGR (Upavishataka).

CONCLUSION:

On the basis of etiology and clinical features of Intra Uterine Growth Restriction (Upavishataka), it is associated with nourishment of fetus. Development of fetus is dependent on mother. The drugs included in vidaryadi ksheerpaka not only effects on fetal development but also on mother's health and wellbeing. There was good response of vidaryadi ksheerpaka in Upavishataka and it is safe, without any adverse effects. It is economical and effective formulation for the management of Upvishataka (IUGR). Therefore it can be concluded that vidaryadi ksheerpaka can be used effectively in the management of Upvishataka (IUGR).

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